

### **The Invention**

As amended, the claims now relate to the use of specific amounts of butyl tallate in foundry binder systems that cure in the presence of gaseous sulfur dioxide and a free radical initiator. Data indicate that the addition of butyl tallate to the binder improves the tensile strength development and humidity resistance of cores and molds made with these binders.

### **DISCUSSION OF EXAMINER'S OFFICE ACTION**

#### **Claim Rejections - 35 USC § 112, first paragraph**

Claim 3 was rejected under 35 U.S.C. 112, first paragraph the Examiner contends that there does not appear to be a written description requirement of the term "about" associated with the number 200 in the application as originally filed.

#### **Applicants' Response**

Claim 3 was amended to remove the language objected to by the Examiner.

#### **Claim Rejections - 35 USC § 102 (e)**

**Claims 1-13 are rejected under 3 U.S.C. 102 (e) as being anticipated by Woodson et al (US 6,604,567).**

Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Woodson et al '567 (US 6,604,567). The Examiner indicated that this rejection was adequately set forth in paragraph 6 of Office action mailed 1/12/2005.

#### **Applicants' response**

Applicants submit that Woodson does not anticipate the amended claims for three reasons.

- (1) Woodson does not mandate that butyl tallate be used in the foundry binder and butyl tallate is an essential component of the binder claimed in Applicants' amended claims. Instead, Woodson discloses, as was mentioned in Applicants'

previous response, a "laundry list of solvents" and that solvents are optional in Woodson.

- (2) Woodson mandates that an alkyl silicate be used in the binder composition and an alkyl silicate is not an essential component of Applicants' binder composition.
- (3) Woodson does not teach or disclose the amount of butyl tallate required in the binder composition, while Applicants' claims explicitly state that the amount of butyl tallate required is from 1 to 30 parts by weight, based upon 100 parts by weight of binder.

Anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims. See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986), and *Akzo N. V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir. 1986). There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. 102. See *Scripps Clinic and Research Foundation v. Genetech, Inc.*, 18 U.S.P.Q. 2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industrie*, 220 USPQ 841 (CAFC 1984). Furthermore, each and every claim recitation must be considered in evaluating anticipation. See *Pac-Tec, Inc. v. Amerace Corp.*, 903 F. 2d 796, 14 USPQ2d 1871 (Fed. Cir 1990).

Additionally, it should be noted that the Examiner issued a double patenting rejection based upon U.S. Patent 6,604,567. Obviously, the Examiner would not have issued the double patenting rejection if the amended claims claimed the same subject matter as that claimed in U.S. Patent 6,604,567. A Terminal Disclaimer is enclosed to overcome the double patenting rejection.

Applicants submit that the amended claims are not anticipated by Woodson, and request that this rejection be withdrawn.

### **Claim Rejections - 35 USC § 103 (a)**

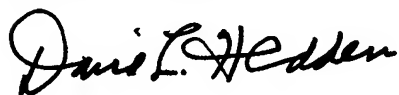
Claims 1-6 and 9-11 were rejected under 35 U.S.C. 103 (a) as being unpatentable over Woodson '576 (US 4,806,576, cited on IDS dated 7/25/2003) in view of Kwasniok et al (DE S dated 7125/2003). They were also rejected under 35 U. S. C. 103 (a) as being unpatentable over Kwasniok et al (DE 19727540) alone or Kwasniok et al in view of Aizpurua et al (I. Appl. Poly. Sei., Vol. 76, 1269-1279).

Claims 7-8 were not rejected under 35 USC § 103 (a), so Applicants assume they are patentable that the Examiner agrees that these claims are not obvious in view of the prior art. These claims are limited to a composition wherein the fatty acid ester is butyl tallate. Claim 1 has been amended to incorporate this limitation into claim 1. In view, of this Applicants submit that claim 1 and the remaining claims, which are directly or indirectly dependent upon claim 1, are now patentable.

### **CONCLUSION**

Applicants submit that the application is now in condition for allowance and respectfully request a notice to this effect. If the Examiner believes further explanation of Applicants' position is needed, Applicants' attorney will discuss this matter over the telephone or visit the Examiner personally if this may be useful.

Respectfully submitted,



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